



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
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Toll Free (800) 451-6027
www.idem.IN.gov

Date: September 8, 2008

To: Interested Parties

From: Bruce H Palin *BHP*
Assistant Commissioner
Office of Land Quality

Subject: Concentrated Animal Feeding Permits

The Indiana Department of Environmental Management (IDEM) is notifying Pasman Pleasant Dairy, LLC, that they have satisfied the requirements to receive coverage under an individual National Pollution Discharge Elimination System (NPDES) permit. The permit authorizes the construction and operation of a dairy.

Please find enclosed a copy of the notice of decision and a responsiveness summary to comments that was prepared based on questions and concerns received by IDEM relative to the operation. Copies of the individual NPDES permit and briefing memo can be viewed at the following agency web site: <http://www.IN.gov/idem/land/permits/notices/index.html> and the virtual file cabinet section.

If you have any questions relative to the notice please contact Mr. Daniel Bruggen at (317) 233-3554, or toll free at (800) 451-6027, extension 03-3554.

Please bring this matter to the attention of persons you believe may have an interest in it.

Enclosures: Notice of Decision
Responsiveness Summary to Comments

cc: Gerrit H.J. Pasman- Pasman Pleasant Dairy, LLC
Dave Gerdeman- North Point Engineering (with enclosures)
Karen Miller- Vreba-Hoff Dairy Development, LLC (with enclosures)
Brian Daggy- Agricultural Environmental Consulting, LLC (with enclosure)



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NOTICE OF DECISION

Indiana Department of Environmental Management

Please be advised that the Indiana Department of Environmental Management (IDEM), has issued an Individual NPDES Permit for Pasma Pleasant Dairy, LLC, which is located near the intersection of County Road 600 North and County Road 975 West in Carroll County, Indiana. This permit allows Pasma Leasing, LLC, to construct and operate a Concentrated Animal Feeding Operation that includes three confinement barns housing a total of 2,540 dairy cows, 50 dairy calves, a concrete silage pad, manure and wastewater collection and storage systems, a milking parlor, and offices.

If anyone wishes to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 require that they file a petition for administrative review not later than fifteen (15) days after being served with this notice. Under IC 13-15-6-7(c) you are considered to be served with this notice when you are personally served with the notice or three (3) days after the notice is deposited in the United States mail and addressed to you, whichever occurs first. Your petition describing your intent to challenge the IDEM decision must be submitted to the Office of Environmental Adjudication, Indiana Government Center North, 100 North Senate Avenue, Room N501, Indianapolis, Indiana 46204-2200.

Your filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing: (1) The date the document is delivered to the Office of Environmental Adjudication (OEA), (2) The date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail, or (3) The date on which the document is deposited with a private carrier, as shown by the receipt issued by the carrier, if the document is sent to the OEA by private carrier. This petition must include facts demonstrating that the petitioner is the applicant, a person aggrieved by the decision, or a person entitled to review by law.

Additionally, IC 13-15-6-2 requires that such petition for administrative review include: (1) The name and address of the person making the request, (2) The interest of the person making the request, (3) Identification of any persons represented by the person making the request, (4) The reasons, with particularity, for the request, (5) The issues, with particularity, proposed for consideration at the hearing, and (6) The permit terms and conditions which, in the judgment of the person making the request, would be appropriate.

Pursuant to IC 4-21.5-3-5(d), the Office of Environmental Adjudication will provide the petitioner or any person requesting notice with notice of pre-hearing conferences, preliminary hearings, hearing stays or orders disposing of the petition for review if a written request for such notice is submitted to the Office of Environmental Adjudication at the above address. If you have procedural or scheduling questions regarding your petition, you may contact OEA by dialing (317) 232-8591.

Questions regarding the technical aspects of the permit decision should be directed to Daniel Bruggen, by calling (800) 451-6027, press 0 and ask for extension 3-3554, or dial him direct at (317) 233-3554. Please bring this matter to the attention of persons you believe may have an interest in it.

**Indiana Department of Environmental Management
Response to Public Comments
Pasman Pleasant Dairy, LLC
NPDES CAFO Permit Application**

On January 30, 2008, Pasman Pleasant Dairy, LLC, submitted to the Indiana Department of Environmental Management (IDEM) an application for a National Pollutant Discharge Elimination System, Concentrated Animal Feeding Operation (NPDES CAFO) individual permit. The application is a request to construct and operate a dairy populated with 2,540 mature dairy cattle and 50 dairy calves.

IDEM received public comments concerning this application both in writing, by phone and during a public comment period. Similar comments have been consolidated and paraphrased into one comment for efficiency of response.

The following responses have been prepared by IDEM staff to address the concerns expressed.

1. **Comment:** There is a concern about the amount of waste this dairy may produce.

Response: The state regulations require these farms to be designed to provide for six months storage capacity of manure and wastewater. It also requires that farms have access to sufficient acreage to apply the manure at agronomic rates based on crop nutrient demand and soil fertility levels. This farm's waste storage system provides approximately one year of storage capacity and the farm has access to more than sufficient acreage for land applying manure and wastewater.

2. **Comment:** There is a concern that land application of manure will contaminate surface waters with increased nitrogen from manure runoff and have a negative impact to fish and other wildlife.

Response: Land application of the manure and wastewater in compliance with the permit conditions provides a high level of confidence that the potential of runoff and nutrient loss to surface waters will be minimized. These requirements include:

1. Do not land apply manure when the soil is saturated.
2. Monitor field nutrient levels as well as the manure nutrient content in order to land apply at agronomic rates.
3. Monitor rainfall predictions at least 24 hours in advance and 24 hours after any land application activities.
4. Implementation of a Soil Conservation Practice Plan on land application sites.
5. Maintain required setback distances from site features including field tile inlets, streams, ditches, ponds and wetlands.
6. Monitoring of field tiles that outlet under or bordering the land application sites during and after manure applications.
7. Document compliance with the above by keeping records for at least five years and made available to IDEM.

The Soil Conservation Practice Plan must be implemented on all manure application sites owned or controlled by the permittee. The plan must be written in accordance with USDA standards to minimize nutrient loss through leaching and runoff. The plan will address each field's limiting factors and what measures are needed to achieve the adopted performance standards. These measures are site specific and can include but are not limited to; timing of application (spring vs. fall), method of application, rate of application and the installation of erosion control practices and structures.

3. **Comment:** Groundwater quality will be impacted as a consequence of the dairy activities.

Response: Protecting the quality of ground water is also a major concern of IDEM. All of the state standards for design of waste storage structures, and the standards for land applying the manure are intended to provide a high level of protection of ground water quality. For this location and proposal, IDEM is requiring the installation of a ground water monitoring system at the production area. This provides the ability to measure the groundwater quality in close proximity to any manure or wastewater storage structures. The wells identified in the application are piezometers, which will be utilized to determine ground water flow direction. The final locations of the ground water monitoring wells are depicted on page 2 of 10, from the plans received by IDEM on May 27, 2008. The facility will be required by IDEM to sample all the ground water monitoring wells semi-annually. All ground water sampling and analysis results shall be submitted to IDEM within sixty (60) days of sampling.

4. **Comment:** Can we adequately regulate, inspect, and monitor these facilities under the current rules?

Response: IDEM believes the current rules and regulatory program provide a great deal of oversight when it comes to issues that address protecting water quality. This oversight begins with design and construction requirements then continues with manure handling and land application activities and concludes with self monitoring and record keeping requirements, which

are reviewed by our compliance staff during farm inspections. IDEM will provide appropriate oversight to assure the farm complies with the imposed requirements. IDEM will conduct inspections of the facility during construction and operation to assure compliance with the regulations and permit. Those inspections will also verify that self-inspections are being conducted by the permittee.

5. **Comment:** Concerned about health effects from pathogens found in manure.

Response: Properly land applied manure presents a minimal risk of pathogen exposure. Protecting water quality serves to minimize potential of any exposure to surface waters or groundwater containing manure pathogens. The application contains land use agreements and associated field maps documenting 2,238 tillable acres of farmland available for land application.

6. **Comment:** There is a concern that groundwater will be depleted by the dairy farm.

Response: The permittee will be conducting a pump test as part of the development of a ground water monitoring plan, which will determine the capacity and ability of the aquifer to provide the quantity of water needed. The Department of Natural Resources (DNR) administers state law IC 14-25 which address certain situations where a large well is adversely impacting other wells.

7. **Comment:** Several comments were received concerning airborne pollutants, odors, noise and property values.

Response: IDEM is given the authority through legislation and the rules to regulate CAFOs based on water quality concerns. Other concerns relative to odors, traffic, property values, etc. are outside of IDEM's authority to address through the permitting process. Local land use ordinances must be relied upon to address those issues. There are currently no national or Indiana standards for odors. However, the US EPA is conducting a two year study of air emissions from animal feeding operations. The study will include what types of pollutants are present and the quantity released. Based on the results, EPA will give a recommendation on any permitting requirements that may be appropriate to address those emissions.

8. **Comment:** Rattlesnake Creek, Pleasant Run Ditch and the Wabash River are located within the manure land applications sites. How is the over-application of manure controlled by IDEM?

Response: The requirements listed in response #2 are all good manure management practices that serve to minimize potential of runoff. The Soil Conservation Practice Plan must be implemented on all manure application sites owned or controlled by the applicant. The plan must be written in accordance with standards to minimize nutrient loss through leaching or runoff. The plan will address each field's limiting factors and what measures are needed to achieve the adopted performance standards. These measures are site specific and can include but are not limited to: timing application (spring vs. fall), method of application (injection vs. surface), rate of application, and installation of erosion control practices and structures.

9. **Comment:** How will waste/sand bedding be land applied?

Response: IDEM historically has not dictated the method used for manure land application. The NPDES and CFO regulation was established with strict land application performance standards that must be met regardless of the method utilized.

10. **Comment:** The applicant made no mention of locations of field tile outlets at any of the proposed land application sites. Who will inspect the land application areas?

Response: Many fields may be identified as potential land application sites, but not all will be used at once. The requirements are that the field tiles present just prior to land application activities be identified and monitored.

11. **Comment:** Wash water calculations in the permit application appear to be 2 to 3 times less than what is actually expected. Why?

Response: The application includes an allowance of 10.5 gallons per lactating cow per day as milk parlor waste water to be stored in the lagoons. Table 10 in the Midwest Plan Service publication 18 ("Manure Characteristics") identifies a daily waste water volume of 1.60 cubic feet (11.97 gallons) from the milk house, parlor and holding area. Chapter 4, "Agricultural Waste Characteristics", USDA Soil Conservation Service, Agricultural Waste Management Field Handbook, identifies an allowance of 5 to 10 gallons of water per day per cow from the milking center.

IDEM requires a waste storage volume for 180 days; the application's waste volume generated by the waste wash water is based on 365 days of storage volume.

- 12. Comment:** How will IDEM enforce application of manure for setbacks, surface water drainage, and tile system drainage?

Response: IDEM will be conducting inspections, which address all applicable requirements, including those affecting land application activities.

- 13. Comment:** The rainfall runoff volume calculations in the application had no data included for snow or snow melt contribution. Why?

Response: The calculated runoff is based on 12 months (January through December), 365 days precipitation; wintertime precipitation is included in this volume.

- 14. Comment:** How is the farm planning to manage dead animal disposal?

Response: IDEM does not require that farms detail their intent on mortality management. The State Board of Animal Health is responsible for regulating dead animal disposal. Disposal must be done by one of the following methods: 1) approved disposal plant; 2) burial with special rules; 3) complete incineration and 4) composting.

- 15. Comment:** Who will be testing household wells to assure area residents that their drinking water is safe to drink? Who will be responsible if contamination occurs in wells in the area surrounding the dairy?

Response: IDEM encourage residents to contact their County Health Department to learn the correct procedures to test well water quality. If the dairy is found to be responsible for well contamination, they would be held responsible to correct the problem. IDEM encourages everyone using well water to test the quality of their water with or without the proposed construction of a confined feeding operation. Many residential features and activities in close proximity to a well, including malfunctioning septic tanks and leach fields, over application of lawn fertilizers/pesticides and improperly discarded household chemicals can be a source of well contamination.

- 16. Comment:** The seepage rates of the lagoons do not appear to include any calculations for side wall seepage over the life of the facility. Neither IDEM nor the applicant has addressed the environment or public health impacts from such significant new sources of pollution near private water wells or VERY nearby watersheds.

Response: The lagoons are designed with a three foot thick recompacted soil (clay) liner. The liner is designed to be continuous from the lagoon floor up the exterior sideslope and from the lagoon floor through the interior berms to the adjacent lagoon floor. The calculated seepage rate is 3 times less than the limit allowed by IDEM's rule and is based on a maximum operating depth of 15.5 feet of liquid. Seepage through the exterior sideslope should decrease from the floor to the top of the exterior berm as the depth of liquid decreases up the exterior sideslope.

- 17. Comment:** How will IDEM gain access to the land application sites to perform their own inspection?

Response: IDEM staff have the right to enter any of the applicants property or property used for land application to verify compliance with the regulations and the permit.